

Remarks/Arguments:

Claims 1-2 and 8-10 are pending in the above-identified application. Claim 3 is cancelled. Claims 4-7 and 11-12 have been withdrawn. Claim 13 has been cancelled.

Claims 1 and 2 were rejected under 35 U.S.C. § 102 (b) as being unpatentable over Abe. Claims 1 and 2 were also rejected under 35 U.S.C. § 102 (b) as being unpatentable over Mizusawa. Claims 1 and 2 were further rejected under 35 U.S.C. § 102 (b) as being unpatentable over Matsuda et al. Claim 1 is amended to include the features of claim 3. That is, claim 1 is amended to include,

wherein the electron beam irradiation position detecting unit includes:

... at least one shielding plate for shielding the electron beam, which has an edge brought substantially into contact with the electron beam in a horizontal feed direction of the master; and ...

... an electron beam detector for **detecting a quantity of the electron beam** shielded by the shielding plate.
(Emphasis Added)

With regard to claim 1, neither Abe, Mizusawa, nor Matsuda disclose or suggest "...an electron beam detector for detecting a quantity of the electron beam shielded by the shielding plate."

The Examiner asserts, however, that Applicants' admitted prior art (AAPA) at Fig. 15 and the reference to Tsukuda et al. disclose the features of claim 3, which are included in claim 1. In particular, the Examiner asserts that the "shielding plate" in claim 1 is disclosed by shielding plate 1107 in AAPA of Fig. 15. The Examiner also asserts that the "shielding plate" in claim 1 is disclosed by shielding 106 at Fig. 1 of Tsukuda et al. Shielding plate 1107 in AAPA is for shielding the electron beam bent by the electrode 1105. (Page 2, lines 10-11). A quantity of the electron beam shielded by shielding plate 1107 in AAPA of Fig. 15 is not, however, detected by an "electron beam irradiation position detecting unit." That is, AAPA does not include "an electron beam detector for **detecting a quantity of the electron beam** shielded by the shielding plate."

Tsukuda et al. includes a shield plate 106. (Fig. 1). The shielding plate 106 is adjusted to come in contact with the electron beams at position 302 when the disc is irradiated. (Para. [0054]). Tsukuda et al. does not , however, disclose "an electron beam detector for **detecting a quantity of the electron beam** shielded by the shielding plate." Positive and negative voltages are applied to make the electron beams move position 303 and 304, thus not irradiating the disc. (Para. [0055]). Voltage controller 111 adjusts the magnitude and timing of the voltage so that pits created by the electron beams on the inner and outer circumferential sides of the disc are uniform in shape. (Paras. [0056] to [0063] and Figs. 4B and 4C). No quantity of the electron beams are ever detected in the adjustment process. Thus, Tsukuda et al. does not disclose "an electron beam detector for **detecting a quantity of the electron beam** shielded by the shielding plate."

In contrast, Applicants' exemplary embodiment includes "an electron beam detector for **detecting a quantity of the electron beam** shielded by the shielding plate." Electron beam detector includes shielding plates 121, 122 and detectors 123, 124. (Fig. 2). Electron beam detectors 123 and 124 are connected to shielding plates 121 and 122, respectively for outputting signals a and b proportional to the quantities of the electron beam 120 irradiated on the shielding plate 121 and 122. (Page 9, lines 17-20). Thus, claim 1 is allowable over the art of record. Claim 2 depends from claim 1. Accordingly, claim 2 is also allowable over the art of record.

Claims 3 and 8-10 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over AAPA and Tsukuda et al. The rejection of claim 3 is moot due to the cancellation of this claim. Claims 8-10 are allowable by virtue of their dependency on an allowable independent claim.

Application No.: 10/784,391
Amendment Dated: June 12, 2007
Reply to Office Action of: March 14, 2007

AOY-3972US

In view of the foregoing amendments and remarks, this Application is in condition for allowance which action is respectfully requested.

Respectfully submitted,



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Dated: June 12, 2007

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